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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,597	07/05/2001	Wei Hsin Yao	SEA2655/30874.64USC1	8390

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EXAMINER

MARKOFF, ALEXANDER

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 09/09/2003

15

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/899,597

Applicant(s)

YAO ET AL.

Examiner

Alexander Markoff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 16-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Priority

1. It is again noted that the specification recites priority to US Provisional Application SN 60/078,625, which has no common inventors with the instant Application.

The applicants stated in their response that this claim was an error. The applicants also stated that they delete the reference to claiming priority to this application.

However, it is noted that no amendment to the specification was filed and that the specification still recites priority to US Provisional Application SN 60/078,625.

An appropriate correction is required.

Drawings

2. The drawings are objected for the reasons set forth in the previous Office action.

It is noted that the applicants submitted replacement figures. However, the proposed drawings changes were not indicated.

It is also noted that newly submitted Figure 2 is significantly different from the original Figure.

The absence of the explanation of the changes made preclude the detailed evaluation of the proposed drawings. However, it is noted that at least part 28 in the

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newly submitted Figure 2 is oriented in the opposite direction compare with part 28 of the original Figure 2.

The objection to the drawings is maintained. Proposed drawings corrections are disapproved by the examiner.

Appropriate corrections are required. The examiner requires a marked-up copy of any amended drawing figure, including annotations indicating the changes made.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

Replacement Drawing Sheets

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment. Any replacement drawing sheet must be identified in the top margin as "Replacement Sheet" and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

Annotated Drawing Sheets

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

Timing of Corrections

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Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

Claim Rejections - 35 USC § 112

3. The rejection of claims 1-14 and 27 made in the previous Office action under 35 USC 112(2) is withdrawn in view of the filed amendments.

Claim Rejections - 35 USC § 102

4. The rejection of claims 1, 3-8, 10-12, 16, 18-23 and 25-28 made in the previous Office action under 35 USC 102(b) is maintained.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 2, 9, 13, 14, 17, 24 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 60-219,637 in view of Kuo et al, Baumgart et al and Engelsberg.

JP 60-219,637 teaches a method and apparatus for cleaning and smothering a surface of magnetic disks.

The method comprises directing laser light to irregularities on the surface to reduce them to a predetermined amount.

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The document discloses the size of the irregularities prior to and after the process. It means that the step of detecting and means for detecting are disclosed by the document.

As to claims 2, 9, 17 and 24:

The document is silent regarding whether or not the used laser is a pulsed laser.

However, the use of pulsed lasers was conventional for cleaning and surface modification as evidenced by Kuo et al, Baumgart et al and Engelsberg.

It would have been obvious to an ordinary artisan at the time the invention was made to use a pulsed laser in the method and the apparatus of JP 60-219,637 with reasonable expectation of adequate results in order to use conventional and readily available equipment for the disclosed purpose and because secondary references teach benefits of such lasers. See at least columns 2 and 3 of Engelsberg.

As to claims 13, 14 and 29:

JP 60-219,637 also teaches focusing laser on regularities. The used focusing device comprises optical fiber (5) and lens (4).

The document is silent regarding the detailed construction of the focusing device and thereby fails to specifically recite the use of mirrors.

However, the use of mirrors was notoriously well known in the art for directing light beams (including laser light beams) to the desired location. See at least Engelsberg as evidence.

It would have been obvious to an ordinary artisan at the time the invention was made to use mirrors in the method and apparatus of JP 60-219,637 for their

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conventional purpose with reasonable expectation of adequate results in order to deliver the light from the source to the needed place.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-14 and 16-29 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 6,394,105. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims of the patent disclose means and step for controlling the laser in response to results obtained by analyzing the effect of cleaning. The scope of the term "controlling" comprises continuing cleaning with or without changing the parameters of the cleaning. The continuing of the cleaning is directing the laser beam to remove the contaminants detected.

9. This rejection is added this time since the applicants clarified on the record that the instant application and the patent do not have a common parent application.

Response to Arguments

10. Applicant's arguments filed 6/23/03 have been fully considered but they are not persuasive.

The applicants argue that the rejection over JP 60-219,637 is not proper because the document teaches only melting and softening of the irregularities. According to the applicants this is different from what is required by the claims.

The examiner disagrees. According to the specification (the paragraph bridging pages 2 and 3) the term "burnishing" means rubbing or polishing the surface by smoothing out irregularities. This term also includes ablation vaporization and breaking of irregularities into a smaller pieces.

It means that the disclosed melting and reducing meet the limitation of the term "burnishing", and that the apparatus of JP 60-219,637 is capable of performing the claimed function.

It is also noted that melting of the irregularities would "smooth" them and also would break them.

Moreover, it is noted that the claims do not exclude any additional steps or means.

The applicants also argue that it would not have been obvious to combine the teaching of JP 60-219,637 with the teachings of the secondary references. The applicants base their position on alleging that JP 60-219,637 does not teach cleaning, but teaches only melting.

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This is not persuasive because melting is understood in the art as a method of removing contaminants. See at least column 2, lines 19-37 of Engelsberg.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Markoff whose telephone number is 703-308-7545. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P Gulakowski can be reached on 703-308-4333. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703--308-0651.


Alexander Markoff
Primary Examiner
Art Unit 1746

am

**ALEXANDER MARKOFF
PRIMARY EXAMINER**